

State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Species

1988
Year of Revision
85-118

Approved

Name of Waterway Colorado Road - Tawash CK Drainage

AWC# of Waterway 182-80-10100-3012

AWC Volume & Number _____

USGS Quad Yakutat B-5, C-5

Addition X Correction _____
Deletion _____ Change _____

Change to _____ Atlas
_____ Catalog
_____ Both

<u>Richard Reed</u> Regional Supervisor	<u>3/25/87</u> Date
_____	_____
Drafted	_____

ALASKA DEPT. OF
FISH & GAME

DEC 10 1987

REGION II
HABITAT DIVISION

Species	Date(s) Observed	Spawning	Rearing	Migration
CO	Annually Sept - Dec	X		
CO	Year round		X	

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

The headwaters of this system also flow into the lost river
behind the Airport (North) - @ this point lets not connect the two but
The Airport Fish PASS was constructed on this mainway
as indicated
R. Reed

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) Robert E Johnson (SPORT FISH DIV.)

Date: 3/23/87 Signature: Robert E Johnson

Address: Box 68

Yakutat 99689

Janet E. Hall

LATE FALL, 1985

YAKUTAT AIRPORT FISH PASS

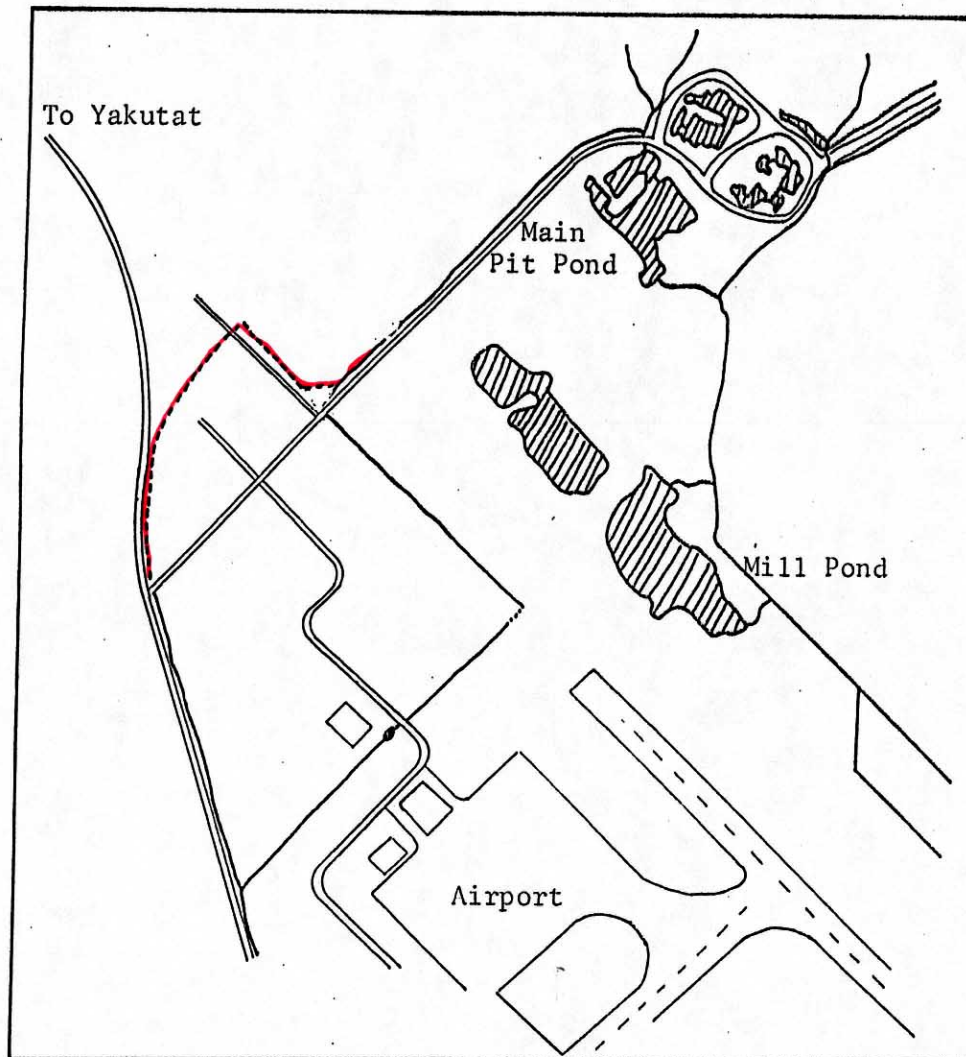
Perhaps the most pressing issue concerning enhancement of fish habitat in the immediate Yakutat area deals with routing adult salmon around the airport. In past years the problem was addressed by netting fish that were blocked by a weir near the DOT shop and transferring them to a point upstream of the airport. The reason for stopping the adult fish is the safety problem encountered with birds (specifically bald eagles) feeding on salmon when they are allowed to traverse ditches along the approach end of the runway. The possibility exists for collisions between birds and aircraft. During the 1985 season there was at least one such incident between an eagle and a BOEING 737.

DOT has stated that depending on the specific route chosen the cost will be approximately \$6000 - \$8000 and require approximately 4 or 5 days to complete. The quote is based on clearing approximately 5000 feet of ditch. It is the opinion of the Commercial Fish Division biologist and myself that only about 4000 feet of clearing will be necessary. It should be noted that the final destination of the fish involved will be the same watershed, namely Colorado Road stream which ultimately flows to both Tawah Creek and Lost River.

During the 1985 coho season approximately 800 adult salmon died unspawned as a result of impeded passage at the DOT weir. Predictions for the next several seasons seem to indicate a continued large number of spawning adults returning to the system. It is unrealistic to try to haul increasing numbers of salmon around a blockage that could be modified so easily. It is interesting to note that the commercial value of the fish lost during this season would have paid for the modification. The fish passage should have been implemented as part of the original airport design.

NOTE:

During the month of February, 1986 funding was received by the Dept of Transportation to create the fish pass. Work began the first week of April and was completed within 6 days. All indications are that the project has been successful.



Yakutat Fish Pass, Constructed April, 1986.

AIRPORT BORROW PIT SYSTEM

The gravel pit ponds located on Colorado Road present a problem in the management of adult coho salmon. These stocks are of Lost River origin although some access the system via Tawah creek.

Historically the only pond located in the lower part of the system was the "Mill Pond". The pond was used by a lumber mill as a sort yard and later as a water stop for the engines of the Yakutat and Southern Railroad.

In recent years Colorado Road (named after an oil exploration company) has been the site of gravel quarrying by local contractors. Other smaller pits were created as the main pit filled with water. The ponds were connected with a tributary of the Lost River system without any research data indicating the feasibility of utilizing the ponds for fish habitat. Perhaps 500 adult coho salmon were trapped in the main pond this winter (November) and presumably died of hypoxia induced by ice cover and low water flows. The majority of fish were unspawned. A dive survey on January 14, 1986 (after loss of ice cover) tallied 116 adult coho carcasses. Approximately half of the carcasses were floating, and it is presumed that more went out with the ice. Two dead coho fry were observed in the pond. The possibility exists that the oxygen level was so low that the fry died of hypoxia. The only live fry that were observed in the pond were near the inlet. There were approximately 200.

One other consequence of the connection of the ponds was that water was possibly rerouted from Tawah Creek to the Lost River. According to the lay of the land, the original flow of the drainage went to Tawah Creek prior to construction of the airport. The additional flow that would be realized by routing water in this direction would aid fish returning from Tawah Creek once the airport fish pass is created.

Recommendations for the airport borrow pit system are as follows:

1. The airport fish pass should be completed during 1986.
2. The inlet to the main borrow pit should be blocked after the fish pass is completed to restore flow to original systems.
3. Ideally, the outlet to the main pit should be crossed by a weir to allow rearing salmonids access to the pond but exclude adult passage. If a weir is not feasible then the outlet to the pond should be blocked during the fall and opened in the spring to allow smolt out-migration for the next few seasons.

NOTE:

The inlet to the main pit pond was blocked and the water routed down the new airport fish pass in early April, 1986.

Additional information is presented in table x.

Information for inclusion in table x.

Airport Borrow Pit System

11/21/85

Dissolved oxygen determination, main pond.

Time 1620 hrs.

Air temp -8 degrees Celsius

Ice cover 6 inches

Depth	Water temp (C)	mg/l Oxygen
4ft	1.9	4.0
7ft	-	4.0

11/22/85
Dissolved oxygen determination, main pond.
Time 1530 hrs.
No temp. readings
Ice cover 6 inches

Depth	mg/l Oxygen
4ft	3.4

11/22/85
Dissolved Oxygen Determination, New Pond (no fish).
Time 1630 hrs.
No temp. readings
Ice Cover 6 inches

Depth	mg/l Oxygen
3.0ft	5.5

(this pond has no fish but is heavily vegetated).

Fry Trapping 11/23/85 - Off Inlet, Main Pond.
Water Temp. 1.5 degrees C

Time Set	Time Pulled	Catch
1500	1530	67 coho*

* Two age classes represented. Many more coho observed around trap, perhaps 200.

Volumetric Data, Outlet main pit pond.

Date	Width	Ave. Depth	Total cfs
7/16/85	11'2"	2.7"	.30
1/13/86	15.0'	5.3"	7.30